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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/646,332	08/22/2003	John A. Geen	2550/189	8282
2101	7590	05/25/2005	EXAMINER	
BROMBERG & SUNSTEIN LLP			KWOK, HELEN C	
125 SUMMER STREET			ART UNIT	
BOSTON, MA 02110-1618			PAPER NUMBER	

2856

DATE MAILED: 05/25/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

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**Office Action Summary**

Application No.

10/646,332

Applicant(s)

GEEN, JOHN A.

Examiner

Helen C. Kwok

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 14-18, 24 and 26 is/are rejected.
- 7) ☒ Claim(s) 1-13, 19-23 and 25 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |  |
|---|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)            |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date ____ | 6) <input type="checkbox"/> Other: ____  |

## **DETAILED ACTION**

### ***Claim Objections***

1. Claims 1-23 are objected to because of the following informalities. Appropriate correction is required.

In claim 1, line 5, what is the word "its" referring to? In line 6, the word "the" before "midpoints" should be deleted. In line 7, the word "the" before the word "corners" should be deleted. In line 11, the word "the" before the word "ends" should be deleted.

In claim 4, line 1, the word "the" should be deleted before the word "ratios". In line 2, what is the word "those" referring to? In line 3, the phrase "the intersection point" should be changed to – an intersection point --. In line 4, what is the word "its" referring to?

In claim 9, lines 2-3, the phrase "the intersection point" should be changed to – an intersection point --.

In claim 11, line 2, the phrase "the frame fingers" should be changed to – the frame finger structures – to provide proper antecedent basis.

In claim 12, line 1, the word – the – should be inserted before the word "stress". In line 1, the word – the – should be inserted before the word "and".

In claim 14, line 4, the word "the" should be deleted before the word "ends".

In claim 18, line 3, the word "the" should be deleted before the word "midpoints".

In claim 19, line 8, the word "the" should be deleted before the word "ends". In line 14, the word "the" should be deleted after the word "through".

In claim 23, line 3, the word "the" should be deleted before the word "midpoints".

***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 14-18 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 14, lines 4-5, the phrase "the box suspension" lacks antecedent basis.

In claim 16, line 1, the phrase "the plurality of stress relief members" lacks antecedent basis.

***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claim 24 and 26 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent 5,392,650 (O'Brien et al.).

O'Brien et al. discloses a micromachined accelerometer gyroscope comprising, as illustrated in Figures 1-10, a substrate 36; a frame 12 supporting a number of resonating structures 18; suspension means PF, EF for suspending the frame over and

parallel to the substrate to restrict movement of the frame to only rotational movement about an axis normal to the substrate; a plurality of stress reducing members SRF anchored to the substrate at an intersection point with a line through a center of the opposite frame sides. (See, as observed in Figure 10; column 10, line 63 to column 12, line 25).

### ***Allowable Subject Matter***

6. Claim 25 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

### ***Conclusion***

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

The reference cited is related to a rotationally vibrated masses having stress reducing means positioned in the center of resonating structures.

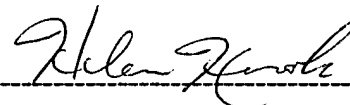
8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Helen C. Kwok whose telephone number is (571) 272-2197. The examiner can normally be reached on 8:30 to 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hezron E. Williams can be reached on (571) 272-2208. The fax phone

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number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Helen C. Kwok  
Art Unit 2856

hck  
May 19, 2005